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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,987	04/16/2001	Keith E. Winkeler	5150-50200	6027

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MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.
P.O. BOX 398
AUSTIN, TX 78767-0398

EXAMINER

ISMAIL, SHAWKI SAIF

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 05/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/835,987

Applicant(s)

WINKELER ET AL.

Examiner

Shawki S. Ismail

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 19-23 and 29-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 19-23 and 29-57 is/are rejected.
- 7) ☒ Claim(s) 32-57 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

RESPONSE TO AMMENDMENT

1. Claim 1-16, 19-23 and new claims 29-57 remain for further examination.

Applicants' arguments with respect to claims 1-16, 19-23, and 29-57 have been fully considered.

The old rejection maintained

2. The rejection is respectfully maintained as set forth in the last Office Action mailed on August 31, 2004. Applicants' arguments with respect to claims 1-16 and 19-23, have been fully considered but they are not persuasive; therefore, old rejection is maintained.

Claim Objections

Claim 32-57 are objected to because of the following informalities: It appears that there was a mix-up in the numbering of the claims See page 7. Specifically the claim that reads The system of claim 29m further comprising....should be relabeled claim 34. the subsequent contain similar informalities and thus need corrections. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-16, 19-23, 29-42, 44-48 and 50-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Snyder et al., (Snyder)**, U.S. Patent No. **6,745,274** and in view of **AAPA** and further in view of **Inohara et al., (Inohara)**, U.S. Patent No. **6,377,952**.

5. As to claim 1, 19 and 29, 35, 42, 45 and 55 Snyder teaches a computer-implemented method for accessing data from a semaphore in a computer system, comprising:

including a first software component in a first application, wherein the first software component is operable to access data from the semaphore, wherein the semaphore is stored in a computer memory, wherein the semaphore is operable to store data of any of a plurality of different data types, wherein the data comprised in the semaphore has a first data type of a plurality of different data types (Abstract, col. 3, lines 11-20, col.4 lines 50-62);

executing the first application (abstract, col.2, lines 25-38, the execution is taken place when the device writes to the shared resource);

Snyder teaches that in the bus lock mechanism, the bus is the only path to location of the lock variable (col. 1, lines 30-35.) Snyder does not explicitly teach receiving a uniform resource locator (URL) which specifies a location of the semaphore, wherein the location information is received in response to user input; the first software component connecting to the computer memory using the location information; the first software component accessing the data comprised in the

semaphore; and the first software component converting the data into a format useable by the first application after the first software component connects to the computer memory and receives the data.

However, applicant admits in the background that "When a program executing on a computer system is required to access data, such as from a semaphore, the program is often required to account for the source or location of the data, opening and closing of files, the format of the data, and conversion of the data to readable formats, among others." Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teaching of AAPA and Snyder to incorporate a URL to specify the location of the semaphore because using a URL universalizes access to the location of the object. A path is used to access a memory location to store an object in both cases but in the instant case the URL makes it easier to access the location because you can access it from anywhere.

Snyder does not explicitly teach where the first software component after accessing the data comprised in the semaphore, converting the data into a format useable by the first application. However Inohara teaches the invention related to a file format conversion method suitable for a plurality of computers to exchange over the World Wide Web information having a plurality of file formats (abstract, col. 1, lines 8-17.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teaching of Snyder and Inohara to incorporate a format

conversion method because doing so will help decrease processing time and increase transmission flow by making application more compatible among different platforms.

6. As to claim 2, 20 and 40, Snyder teaches the method of claim 1, wherein the first software component performs a locked read-modify-write operation on the data comprised in the semaphore (col.1, lines 19-29.)

7. As to claim 3, Snyder teaches the method of claim 1, wherein the first software component accessing the data comprised in the semaphore comprises:

the first software component locking the semaphore (col.1, lines 19-29, lock variable, only one device is able to access a resource at a given time);

the first software component reading the data comprised in the semaphore (col.1, lines 19-29, the atomic instructions allow the device to read the value of the lock variable);

the first software component writing new data to the semaphore (col. 1, lines 19-29, the atomic instructions allow the device to write a value into the lock variable); and

the first software component unlocking the semaphore after said writing new data to the semaphore (col. 2, lines 38-47.)

8. As to claim 4, Snyder teaches the method of claim 3, further comprising:

receiving one or more requests to perform a locked read-modify-write operation on the data comprised in the semaphore from other software components (col. 2, lines 26-38, the device makes a request to access the shared resource);

storing said one or more requests in a queue (col. 2, lines 26-38, the transaction control unit serializes request for access to semaphore); and

wherein said one or more requests are processed after said unlocking (col. 2, lines 38-47, in order to access shared resources the device must put in a request and then unlock the semaphore to access the resource.)

9. As to claim 5 and 21, Snyder teaches the method of claim 1, further comprising:
the first application receiving and processing the data after said converting;
wherein the first application uses the data comprised in the semaphore to
synchronize operations with a second application executing on a second computer system (Abstract, Fig. 6, col. 7, line 60 – col. 8 line 30).

10. As to claim 6, Snyder teaches the method of claim 5, further comprising:
the first software component notifying the application that the data has been
obtained after the software component connecting to the semaphore and receiving the
data; and wherein the application receives and processes the data after said notifying
(col. 2, lines 26-38, the device makes a subsequent request to read the content until it
has successfully obtained access to the shared resource.)

11. As to claim 7, Snyder teaches the method of claim 5, wherein the software
component connecting to the semaphore, the software component receiving the data,
the software component converting the data, and the application receiving and
processing the data are performed a plurality of times (col. 2, 26-38, and col. 4, lines 26-
40, the device makes a subsequent request to read the content until it has successfully
obtained access to the shared resource.)

12. As to claim 8 and 22, Snyder teaches the method of claim 1, wherein the
software component connecting to the semaphore, the software component receiving

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the data, and the software component converting the data are performed without any user programming required (col. 1, lines 36-47, a cache concurrency mechanism, a protocol used to update and the lock variable in one location in response to changes made to the lock variable in a second location.)

13. As to claims 9, 10, 11 and 23, Snyder does not explicitly teach where the format is a self-describing format; wherein said converting comprises converting the data into a generic format; and wherein converting the data into a first format, wherein the first format includes the data and one or more attributes of the data.

However Inohara teaches the invention related to a file format conversion method suitable for a plurality of computers to exchange over the World Wide Web information having a plurality of file formats (abstract, col. 1, lines 8-17.) Inohara also teaches providing a file with a file name conversion method of obtaining the file name of a conversion destination file from the file name of a conversion-originating file (col.4, lines 4-18.) Inohara also teaches that a file table may store various parameters of each file managed by the file system (col. 6, lines 48-65.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teaching of Snyder and Inohara to incorporate a format conversion method because doing so will help decrease processing time and increase transmission flow by making application more compatible among different platforms.

14. As to claim 12, they contain similar limitation of claim 1; therefore they are rejected under the same rationale.

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15. As to claim 13, Snyder teaches the method of claim 12, wherein the first and second applications use the semaphore to synchronize operation of the first and second applications (Abstract, Fig. 6, col. 7, line 60 – col. 8 line 30.)

16. As to claim 14, Snyder teaches the method of claim 12, wherein the first computer system, the second computer system, and the computer memory are connected through a network (col. 3, lines 6-62, the computer system can have a number of cells 103 which are coupled through the interconnect 108, the interconnect 108 is a high speed interconnect such as a network.).

17. As to claim 15, Snyder teaches the method of claim 12, wherein the computer memory storing the semaphore is comprised in one of the first computer system or the second computer system (col. 1, lines 30-47.)

18. As to claim 16, Snyder teaches the method of claim 1, wherein accessing data from a semaphore in a computer system comprises publishing or writing data to the semaphore (col. 4, lines 50-62, a write request can be used to either free the semaphore or obtain access to it.)

19. As to claim 30, 36-38, 44-45, 52, 54 and 59 Snyder teaches the claimed invention as shown above. Snyder does not explicitly teach receiving a uniform resource locator (URL) which specifies a location of the semaphore, wherein the location information is received in response to user input;

However, applicant admits in the background that “When a program executing on a computer system is required to access data, such as from a semaphore, the program is often required to account for the source or location of the data, opening and closing of

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files, the format of the data, and conversion of the data to readable formats, among others." Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teaching of AAPA and Snyder to incorporate a URL to specify the location of the semaphore because using a URL universalizes access to the location of the object. A path is used to access a memory location to store an object in both cases but in the instant case the URL makes it easier to access the location because you can access it from anywhere.

20. As to claims 31, 32, 50-51, 53, 55 and 58, Snyder teaches the method of claim 43, wherein the memory medium is coupled to a network; wherein said communicating with the memory medium comprises using the network and the location information is network location information (col. 3, lines 6-62, the computer system can have a number of cells 103 which are coupled through the interconnect 108, the interconnect 108 is a high speed interconnect such as a network.).

21. As to claim 33, 39, 41, 46 and 48, Snyder teaches the claimed invention as shown above. Snyder does not explicitly teach where the first software component is further executable by the first processor to convert the data into a to a second data type.

However Inohara teaches the invention related to a file format conversion method suitable for a plurality of computers to exchange over the World Wide Web information having a plurality of file formats (abstract, col. 1, lines 8-17.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teaching of Snyder and Inohara to incorporate a format

conversion method because doing so will help decrease processing time and increase transmission flow by making application more compatible among different platforms.

22. As to claim 34, it contains similar limitation as claims 1; therefore, it is rejected under the same rationale.

23. As to claim 47 and 57, Snyder teaches the method of claim 44, wherein the plurality of different data types includes two or more of a number data type, a Boolean data type, a string data type, and an array data type (col. 4, lines 50-62).

24. As to claims 56, Snyder teaches wherein the semaphore is operable to store data of any of a plurality of different data types, wherein the data comprised in the semaphore is of a first data type of the plurality of different data types (col. 4, lines 50-62).

25. Claims 43 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Snyder et al., (Snyder)**, U.S. Patent No. **6,745,274** and in view of **AAPA** and further in view of **Inohara et al., (Inohara)**, U.S. Patent No. **6,377,952** and further in view of **Austin** U.S. Patent No. **6,370,569**.

26. As to claims 43 and 49, Snyder teaches the method of claim 42 as discussed above, Snyder does not explicitly teach wherein communicating with the computer memory using the location information comprises using a data socket.

Austin teaches a data socket client for accessing data from any of various locations and having any of various formats. The data socket client provides access to data located in the system memory or non-volatile memory of a computer (col. 5, lines 20-29).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to incorporate the teaching of Austin into Snyder in order to access data from various sources having various types or formats, wherein the access is provided invisibly to the user.

Response to Arguments

27. Applicants' arguments with respect to claims 1-16, 19-23, and 29-57 have been fully considered but they are not deemed to be persuasive.

28. In the remarks, the applicant argues in substance that:

(A) Argument: Snyder, AAPA, and/or Inohara teach or suggest that a semaphore is operable to store data of any of a plurality of different data types.

Response: Snyder teaches a mechanism for synchronizing access to common resources. Snyder teaches that there are two types of requests: a read request; and a write request. The read request returns the values of both the previous and the current semaphore owners. A write request can be used to either free the semaphore by writing the value 0X7F into the current semaphore register 156 or to obtain access to the semaphore by writing the device's unique identifier into the current semaphore register 156. 0X7F is conventionally used a "stop error message" and is of a different format than the semaphore owner's unique identifier and thus Snyder meets the scope of the claimed limitation.

29. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawki S Ismail whose telephone number is 571-272-3985. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shawki Ismail
Patent Examiner
May 15, 2005



ZARNI MAUNG
SUPERVISORY PATENT EXAMINER